

## A FAST POWER SIGNAL DETECTION PROCESS

## ABSTRACT OF THE DISCLOSURE

5 A valid signal may be detected by initializing gain settings of the receiver section. The processing then continues by measuring received signal strength of a signal received by the receiver section to produce a 1<sup>st</sup> received signal strength indication (RSSI). The processing continues by adjusting the gain setting of the receiver section such that the 1<sup>st</sup> received signal strength indication is a predetermined offset less than a signal strength  
10 threshold. The process then continues by measuring the received signal strength of the gain adjusted representation of the signal to produce a 2<sup>nd</sup> received signal strength indication. The processing continues by appending a 2<sup>nd</sup> offset to the 2<sup>nd</sup> received signal strength value to produce an adjusted received signal strength indication value when the 2<sup>nd</sup> received signal strength value drifts from the signal strength threshold less the  
15 predetermined offset. The processing continues by measuring the received signal strength of received signals and appending the offset until a possible valid signal is detected. When the possible valid signal is detected, the gain of the receiver is adjusted based on its dynamic range.